Key Project Contact:

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Project Abstract: The Kentucky Statewide Wood Energy Team will be the catalyst to coordinate the efforts of a number of existing agency personnel, rural development leaders, agricultural organizations, forestry expertise, and other stakeholders for the purpose of improving the utilization of woody biomass resources for energy uses. In order to enhance the stewardship of our natural resources, strengthen existing forest industry sectors, identify efficiencies, and stimulate new demand for undervalued woody materials, the emphasis will be on **LOGS**:

- All segments of the industry can benefit from improved Logistics in woodland management, during timber harvest, throughout resource transportation, and at each market channel.
- Efforts will be made to evaluate existing biomass energy Opportunities and develop strategies
 to increase awareness, improve financial returns, and expand the feedstocks available for these
 legacy customers.
- Through Growth in expanded bioenergy markets for diseased, insect infected, and storm
 damaged trees, we can reduce the hazardous fuels in our public and private woodlands while
 creating economic opportunities for our rural communities.
- Finally, all of these initiatives will be predicated by a strong emphasis on **Sustainability** that considers energy resource, economic, and environmental criteria.

While the team will consist of a core group of committed partners with extensive industry experience, our intent is to engage additional supporters who can help address the above topics across numerous sectors and throughout the state. Our first two areas of focus will be in helping poultry farmers evaluate the economics and operational aspects of bioenergy heating systems for their barns and identifying the best candidates for cost-effective biomass heating options in our Appalachian region.

Goals and Objectives

- 1. Utilize core team partners to recruit additional supporters and benefactors that can identify and address bioenergy opportunities and deployment challenges throughout the state
- Empower team leadership to further refine strategies for improvements in forestry Logistics, support current wood to energy Opportunities, promote bioenergy Growth, and enhance economic, energy, and environmental Sustainability
- 3. Evaluate best opportunities to foster commercial utilization of hazardous fuel resources found at Land Between the Lakes and Daniel Boone National Forests
- 4. Develop case studies and best practice illustrations that can be shared with interested parties
- 5. Provide educational programing at various industry conferences related to the **LOGS** themes and tailor messaging for poultry sector and Appalachian region
- 6. Facilitate tours to farms and businesses that are effectively utilizing bioenergy and build networks of advocates to address critics

- 7. Strive to identify new sources of funding to incentivize bioenergy investments and create improved access to capital for larger projects
- 8. Create program for poultry producers who deploy biomass heating systems and share their results with others
- 9. Create program for Appalachian businesses that deploy biomass heating systems and share their results with others
- 10. Assemble resource expertise to address basic technical, economic, and permitting issues related to biomass heat
- 11. Identify qualified fee for service project consultants and offer financial support to project developers who need access to these personnel
- 12. Provide funding for at least one issue related study each year that is identified by the core partners as a high priority

Planned Outcomes:

- 1. Create robust networking framework to address current and future wood to energy issues and projects over a four year program tenure
- 2. Generate interest in additional wood heating systems for poultry farms with at least ten new units installed
- 3. Encourage installation of four new commercial size wood to energy projects in eastern Kentucky
- 4. Fund and publish four topic related papers related to key issues identified by team

Core Team Partners:

<u>Tim Hughes</u>, Program Manager – <u>Kentucky Division of Biofuels</u>

<u>Dr. Darrell Taulbee</u>, <u>University of Kentucky – Center for Applied Energy Research</u>

<u>Greg Copley</u>, <u>University of Kentucky – Center for Applied Energy Research</u>

Dr. Yan Cao, Western Kentucky University - Institute for Combustion and Environmental Science

Martin Cohron, Western Kentucky University - Institute for Combustion and Environmental Science

Bill McCloskey, Governor's Office of Agricultural Policy

Angela Justice, Governor's Office of Agricultural Policy

Larry Lowe, Kentucky Division of Forestry

Stewart West, Kentucky Division of Forestry

Dr. Jeff Stringer, University of Kentucky – Department of Forestry

Bobby Ammerman, University of Kentucky – Department of Forestry

Bobby Clark, Midwest Clean Energy Enterprise, LLC

Loretta Daniel, Murray State University – West Kentucky AgBioworks

Scott Shouse, Mountain Association for Community Economic Development

Jamie Guffey, Kentucky Poultry Federation

Supporting Organizations & Personnel:

Dan Len, USDA Forest Service

Robert Sitzlar, US Forest Service – Daniel Boone National Forest

Dr. Pat Fowler, US Forest Service – Land Between the Lakes Recreation Area

Bob Bauer, Kentucky Forest Industries Association

<u>Dr. Bruce Pratt, Eastern Kentucky University – Center for Renewable and Alternative Fuel Technologies</u>

Scott Maas, USDA Rural Development

Jeff Jones, USDA Rural Development

Robi Fauser Fink, USDA Rural Development

Mark Mason, USDA Rural Development

Warren Beeler, Kentucky Department of Agriculture

Lissa McCracken, Kentucky Pollution Prevention Center

Cheryl Eakle, Kentucky Pollution Prevention Center

<u>Danielle Crosman, Kentucky Division of Compliance Assistance</u>

Emily Ohde, Kentucky Division of Compliance Assistance

<u>Dr. Nancy Cox</u>, <u>University of Kentucky College of Agriculture</u>

Kentucky Agricultural Council

Dr. Douglas Overhults, University of Kentucky Biosystems and Agricultural Engineering

Dr. Len Peters, Kentucky Energy and Environment Cabinet

Dr. Jagannadh Satyavolu, University of Louisville – Conn Center for Renewable Energy

Rick Jones, St. Joseph Biomass Solutions

Ricky French, Kentucky Air National Guard

Alex Baker, Vermeer Midwest, Inc.

Daniel Sanders, Energy Systems Group